

WATER QUALITY TEAM MEETING NOTES

July 17, 2001

**National Marine Fisheries Service Offices
Portland, Oregon**

Introductions and Review of the Agenda.

Mary Lou Soscia of EPA and Mark Schneider of NMFS, WQT co-chairs, welcomed everyone to the meeting, held July 17 at the National Marine Fisheries Service offices in Portland, Oregon. The meeting was facilitated by Richard Forester. The meeting agenda and a list of attendees are attached as Enclosures A and B. Please note that some of the enclosures referenced in these meeting notes may be too lengthy to routinely attach to the minutes; please contact Kathy Ceballos (503/230-5420) to obtain copies.

2. Water Quality Plan Update.

Rick Emmert of the Corps' Walla Walla District provided a presentation on the newly-released draft Interagency Water Quality Plan. Emmert went through a series of overheads, copies of which are attached as Enclosure C. Emmert began by reviewing the purpose of the Water Quality Plan:

- To ensure progress in the long-term goal of working toward the CWA-related water quality standards primarily for TDG and temperature but for other parameters as well.

Emmert also touched on the participants in the plan's development, (BPA, COE, Reclamation) and the following major points:

- it is an interagency effort.
- ESA and CWA are separate but related issues.
- The Corps is committed to ESA water quality requirements and the Water Quality Plan.
- The focus is on temperature and TDG.
- The action agencies propose a three-phase approach to the development and implementation of the Water Quality Plan.

Emmert also addressed the connections between ESA and CWA issues in this plan, the various funding sources that will be used to implement the Water Quality Plan, the three-phased approach the

action agencies intend to use (technical phase, decision phase, implementation phase). Emmert said a preliminary draft project management plan is now available, laying out how the action agencies intend to complete the technical phase; he distributed copies of this document (Enclosure D).

Emmert said the action agencies plan to participate in the TMDL development process if requested. We have already made that request – it's on the table, Soscia replied. We will start putting together a technical team to review the TMDL work products, Emmert said.

Some of the remaining issues associated with the Water Quality Plan include the following, Emmert said:

- Agency roles and responsibilities.
- Funding – ESA (mainstem, CRFM), CWA (no clear funding source, possible O&M, GI or Construction General).
- Schedule – multi-year.

The group spent a few minutes discussing the connection between the ESA and the CWA in this document, with Emmert observing that the action agencies feel that some of the CWA requirements which are not necessary for salmon survival may not be implemented immediately. Soscia took issue with this statement, noting that, from EPA's perspective, meeting the CWA standards is necessary for salmon survival. Schneider observed that there is still considerable negotiation necessary before decisions are made about which projects are immediately necessary to address CWA compliance and which can be deferred; I would urge that the action agencies' discussion of this issue be an open one, Schneider said. Dick Cassidy observed that, in many cases, it is a question of funding source – with limited resources, he said, all we're saying is that we need to focus initially on those items that will have the greatest benefit for fish.

We believe, at EPA, that water quality is good for fish, and that good water quality is vital to salmon recovery, Soscia said. We need to work on the vernacular in this report and presentation, she said, because we have made a commitment to work together – quite frankly, I find it offensive that the Corps would stand up today and say they are unwilling to work on projects that are good for fish. That's not what we're saying, said Cassidy. Still, this is something that needs some very serious work, Schneider said – you can't set aside CWA activities without having a serious detrimental impact on recovery.

My understanding is that the essence of the Biological Opinion is the survival and recovery standards in the BiOp, said Bill Hevlin; we tend, at SCT, to prioritize those projects which will provide the greatest survival benefit and help the action agencies meet the performance standards in the BiOp. That's all we're saying, said Emmert – in a situation where resources are limited, we have to put a higher priority on those items that will provide the most bang for the buck.

We're looking for comments on this draft, if you have any, Emmert added.

So this funding thing could be a way to keep certain projects from going forward, if an item is ranked medium to low under CRFM, but is still required by the CWA, Margaret Filardo observed. It adds another layer of complexity when you separate CWA and ESA projects and funding sources, she said. We would love to work on this with you further, said Soscia. We would like that as well, Emmert replied.

Is there a schedule for finalizing the draft project management plan? Schneider asked. We want to finalize it by the end of September, Emmert replied. And you would like comments by...? Schneider asked. Get them to me as soon as possible, by the end of July, if possible, Emmert replied. We would also like to schedule a meeting between the action agencies, EPA, the states and NMFS, to talk about the language in this document, and better coordination between the TMDL and the Water Quality Plan, Soscia said – we need a work session on how we pull all of this together, as well as basic issues like how you articulate the Clean Water Act in this document. The Corps will take the lead in setting up that meeting, Cassidy said.

3. Report on 2001 Dworshak Operations.

Paul Wagner said that, for the past couple of years, the region has debated how best to operate Dworshak Dam to control temperatures in the Lower Snake River. That ongoing annual debate now includes the development of various Dworshak and Brownlee operational scenarios for modeling by the Corps and EPA. Last year we ran 27 different scenarios, Wagner said; this year, with a little better idea of what the model was going to tell us, we only ran four.

Wagner spent a few minutes going through the scenarios modeled: Dworshak 1 (release 14 Kcfs beginning July 2, go down to 10 Kcfs the week of July 23, to 6 Kcfs the week of August 19, then down to minimum outflow), Dworshak 2 (release 10 Kcfs beginning July 2, hold until Dworshak reaches elevation 1520 in the third week in August), Dworshak 3 (two weeks at 7 Kcfs beginning July 2, followed by two weeks at 8 Kcfs, two weeks at 10 Kcfs, one week at 9 Kcfs, two weeks at 8 Kcfs and two weeks at 4.5 Kcfs – a tribal alternative designed to save some cool Dworshak water for use on adults in the fall), and Dworshak 4 (release 5.5 Kcfs beginning the first week in July, followed by one week at 6 Kcfs, one week at 7 Kcfs, one week at 8 Kcfs, three weeks at 10 Kcfs, followed by one week each at 8, 7, 6, 5 and 4 Kcfs).

Wagner then spent a few minutes going through the model results for these four scenarios. The bottom line is that, based on these model runs, what the TMT has recommended for this year, and what has subsequently been implemented by the action agencies, is essentially Scenario 2 – the straight 10 Kcfs release with a bit of a ramp-up over Fourth of July week, Wagner said.

Wagner said Early-July forebay temperatures at Lower Granite reached 23 degrees C -- 77

degrees F -- before the cooling effect of the Dworshak release began to make itself felt; current tailwater temperatures at Lower Granite are about 19 degrees C, a little higher than we would like to see, but pretty close to what the model predicted, he said. Soscia added that EPA is monitoring the temperature situation closely, and, as they did last year, will produce a retrospective analysis of the effects of 2001 Dworshak operations on water temperatures in the Lower Snake River. Filardo observed that it would be interesting to include an analysis of how effective Dworshak operations might have been if the project operators were not constrained by the lack of an Idaho dissolved gas waiver and the 14 Kcfs Dworshak outflow limitation -- if it would have been possible to release, say, 22 Kcfs from Dworshak, the volume that produces 120% TDG below that project.

Wagner noted that, so far, Lower Snake water temperatures have been some of the highest on record -- much higher than expected, due to the very low flows and high air temperatures experienced so far in the summer of 2001. Filardo added that up-to-the-minute water temperature information is available via the FPC website.

4. Columbia/Snake Mainstem TMDL Update.

Soscia distributed Enclosures F, G, H, I and J, a series of handouts regarding the TMDL development process: fact sheets about the TMDL process and the RBM-10 water temperature model, as well as proposed agendas for the July 23 temperature and TDG workshop in Spokane and the July 24 workshop in Portland. The purpose of these workshops is to share information during the TMDL development process, Soscia explained.

EPA's Teresa Kubo spent a few minutes reviewing the agendas for the Portland and Spokane workshops; Soscia noted that 40-50 people are already registered for each of these workshops. We're moving ahead, she said; we finally have a complete, signed MOA, which we will be distributing copies of soon. She added that a CD-ROM edition of the user-friendly version of EPA's RBM-10 temperature model are now available.

Soscia added that there was a very useful TMDL development work session a couple of weeks ago in Seattle. She noted that EPA is taking the lead in developing the TDG portion of the TMDL for Lake Roosevelt; they are also working on the tribal consultation process. There will be a water quality conference held September 26-28 at Kah-Nee-Tah which all of the tribes will be invited to attend, Soscia said, noting that some of the sessions at this conference will be tribal only. We have also been communicating directly with the tribes to keep them abreast of the most recent developments in the TMDL process, she said.

Joyce Cohen and Soscia noted that Oregon will be releasing its draft, pre-decisional Lower Columbia TDG TMDL at next week's meeting, for regional review.

5. Report on the Potential Use of Grand Coulee to Impact Water Temperatures in the

Columbia.

Ben Cope of EPA's Region 10 office in Seattle led this discussion, noting that the idea he wanted to address is the potential use of Grand Coulee Dam to regulate temperatures in the Lower Columbia River, much as Dworshak is used to regulate temperatures in the Lower Snake River. He distributed Enclosure K, a document titled "Reasons to Evaluate Grand Coulee Operations with Respect to Downstream River Temperatures."

Grand Coulee is a large, stratified reservoir; there should be some value in tapping into the colder, lower-strata water in that system, but to my surprise, there doesn't seem to have been a lot of study of this idea so far, Cope said. He then spent a few minutes going through Enclosure K, noting first of all that there is as much as 5 degrees C difference between the water in the top stratum of Grand Coulee reservoir and water in the lower strata. Other key points:

- There is general agreement that cold water releases from the stratified Dworshak Reservoir have a measurable influence on downstream Snake River temperatures.
- There are a number of relevant studies and assessments available, although most of these are fairly old (some examples attached to Enc. K).

Dave Zimmer said the Corps did a preliminary analysis of the potential for using Grand Coulee to cool the Lower Columbia last fiscal year; the analysis concluded that some benefits would accrue, although they likely wouldn't be as dramatic as what some of this older work shows. My recollection is that the analysis showed that there isn't enough cold water in Grand Coulee to last more than a few weeks; in general, he said, we need to do some more modeling analysis. Any feel for where EPA is in their modeling effort on FDR Lake? Zimmer asked. We have constructed a model, Rick Parkin replied; one problem is figuring out how much water could be extracted. Results so far are somewhat mixed, Parkin said – the simulated downstream temperatures are generally a little cooler than the observed temperatures, which is a little troubling. All I can say is that we do have the model running, said Parkin, but we don't feel comfortable with the results, to this point. It would be helpful if we could get better information on where and how much water is being extracted from that project, he added. It sounds as though the EPA and Corps modelers need to sit down and iron out those technical details, Cohen suggested. We would be glad to do that, Soscia replied.

The group spent a few minutes discussing the information needs associated with this project; ultimately, Jim Irish observed that the tribes around Lake Roosevelt are adamantly opposed to any additional water withdrawals from the lake, from both a limnological and a cultural resources perspective. Schneider observed that the questions that need to be answered are fairly basic. Steve Hayes said his first suggested order of business would be to evaluate where the third powerhouse withdraws water from, compared to the other two powerhouses, then do an analysis about the temperature effects of various operational scenarios, to see which existing withdrawal scenario produces the lowest temperatures downstream. Grand Coulee is already several weeks ahead of its

normal temperature regime, with the hottest part of the summer ahead of us, Hayes said – if we can get even a one degree C reduction in temperature through an optimized operational regime, that could be critical for returning adults in the Lower Columbia this summer.

Where do we go next with this? Schneider asked. I think EPA needs to sit down with the Corps and the Tribes to discuss the status of the Lake Roosevelt temperature modeling effort, and information needs associated with that effort, Soscia replied. Parkin agreed, noting that there are a variety of monitoring and data collection needs it would be helpful to discuss. Zimmer suggested that this meeting take place at Grand Coulee Dam. Soscia said she will take the lead in organizing this meeting.

How far downstream do you expect the Grand Coulee temperature effects to extend? Irish asked. Pretty danged far, Cope replied. At least as far as Chief Joseph and the Wells Dam pool, Hayes said.

6. State Updates.

A. Washington. Chris Maynard said Washington is in the process of developing new water quality standards, including water temperature standards; these new standards will soon be submitted to EPA. Maynard added that the public comment period is now complete; the target date for submitting the standards to EPA is early fall.

7. Next WQT Meeting Date.

The next meeting of the Water Quality Team was set for Tuesday, August 21 from 1-4 p.m. at NMFS' Portland offices. Meeting notes prepared by Jeff Kuechle, BPA Writer-Editor pool.